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ALASKA SAR FACILITY OCEAN AND ICE DATA OPPORTUNITIES OVER THE NEXT DECADE

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The Alaska SAR Facility (ASF) is currently processing data from 4 satellites, ER-1 and -2 flown by ESA, JERS-1 flown by NASDA of Japan, and RADARSAT flown by CSA. All of these generate SAR data useful for ice observations and 3 of them generate data useful for ocean observations (JERS-1 is not at an optimal incidence angle for typical ocean backscatter). The data sets from these satellites are available to approved US and other investigators although the approval mechanisms are different. Over the next 5 years 2 additional satellites will be added to this total, 1 ENVISAT from ESA and ALOS from Japan, and these satellites carry SAR instruments of increased capability for ocean and ice observations. In particular, ASAR on ENVISAT will provide both HH and VV polarizations from a variety of incidence angles and swath widths at C-band while VSAR on ALOS will provide fully polarimetric data at L-band. A US free-flying satellite, LightSAR, is also under discussion for this timeframe. We will discuss the anticipated situation for access to these data sets by the scientific community, and we will speculate on what the major oceanographic applications may be.